.n By 4

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 09/503553

Filing Date: February 11, 2000

Title: SYSTEM AND METHOD FOR OPTIMIZING PRINTING OF A PHASE SHIFT MASK HAVING A PHASE SHIFT ERROR

REMARKS

Page 13

Dkt: 303.311US2

This is in response to the Office Action mailed on December 19, 2003, and the references cited therewith.

Claims 23, 27, 29, 32, 34, 36, 39, 40, 51, 57, 59, 61, and 63-66 are amended, no claims are canceled, and no claims are added; as a result, claims 23-67 remain pending in this application.

Double Patenting Rejection

Claims 23, 32, 34, 36, and 39 were rejected under the judicially created doctrine of double patenting over claims 1, 3, 4, and 33 of U.S. Patent No. 6,096,457.

Applicant will consider filing a Terminal Disclaimer when all claims are indicated to be otherwise allowable.

§103 Rejection of the Claims

Claims 23-46 and 49-67 were rejected under 35 USC § 103(a) as being unpatentable over Gortych et al. (U.S. Patent No. 5,680,588) in view of Suzuki et al. (U.S. Patent No. 5,673,102). Applicant respectfully traverses the rejection for at least the following reasons.

Applicant does not admit that the required teaching to combine these references is present. However, in the interest of moving this application forward towards allowance, Applicant respectfully submits that even if the references were combined, all elements of the claims as amended above cannot be found in Gortych and Suzuki, either alone or in combination.

Applicant agrees with the Examiner as stated on page 3 of the pending office action, that Gortych et al does not teach a design choice of a restrictor as claimed. The rejection states, however, that "Suzuki discloses the claimed designed choice of a restrictor to restrict light from passing through a first region having a first perimeter and to pass light through a second region between the first perimeter and a second perimeter that surrounds the first perimeter."

Suzuki appears to show stop member 18 with a ring-like aperture. The stop member 18 of Suzuki appears to be used to block light near the optical axis of the apparatus for attenuation purposes, however, the stop member of Suzuki is not adjustable.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 09/503553

Filing Date: February 11, 2000

Title: SYSTEM AND METHOD FOR OPTIMIZING PRINTING OF A PHASE SHIFT MASK HAVING A PHASE SHIFT ERROR

el_t e

In contrast, claims 23, 27, 29, 32, 36, 39, and 57 as amended include a first region having an adjustable first perimeter; a second region between the first perimeter and an adjustable second perimeter that surrounds the first perimeter. Further in contrast, claims 34, 59, 63-65 as amended include a ring wherein the ring has an adjustable inner radius and an adjustable outer radius. Further in contrast, claim 61 as amended includes an adjustable restrictor sigma in and an adjustable restrictor sigma out for varying light from the illuminator with respect to an optical axis. Further in contrast, claims 40 and 51 as amended include restricting light from passing

Page 14 Dkt: 303.311US2

region between the first perimeter and an adjustable second perimeter that surrounds the first perimeter. Further in contrast, claims 45, 49, 66, and 67 include varying sigma in and sigma out

parameters. Further in contrast, claim 43 includes changing an inner radius of a ring and

through a first region having an adjustable first perimeter and passing light through a second

changing an outer radius of the ring.

Because the cited references, either alone or in combination, do not show every element of Applicant's independent claims, a 35 USC § 103(a) rejection is not supported by the references. Reconsideration and withdrawal of the rejection are respectfully requested with respect to Applicant's independent claims 23, 27, 29, 32, 34, 36, 39, 40, 43, 45, 49, 51, 57, 59, 61, and 63-67. Additionally, reconsideration and withdrawal of the rejection are respectfully requested with respect to the remaining claims that depend therefrom as depending on allowable base claims.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 09/503553

Filing Date: February 11, 2000

Title: SYSTEM AND METHOD FOR OPTIMIZING PRINTING OF A PHASE SHIFT MASK HAVING A PHASE SHIFT ERROR

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 373-6944 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

CHRISTOPHE PIERRAT ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

P.O. Box 2938

Minneapolis, MN 55402

(612) 373-6960

Date $\frac{3-/8-09}{}$

David C. Peterson

Reg. No. 47,857

Ting Kohat 2'Cht

Name

Signature